## **SECTION 1072 -- REFLECTORS**

## 1072.01 -- Description

Authorized reflectors are described in this Section.

## 1072.02 -- Material Characteristics

- 1. The reflector shall consist of a round retroreflecting lens permanently bonded and hermetically sealed to its back.
- 2. The back may be either acrylic plastic or metal foil; however, the foil back reflectors must have a minimum 0.018 inch thick aluminum housing.
  - 3. The aluminum housing is not required with the acrylic plastic back.
- 4. The reflector shall have a mounting hole in the center with a diameter of not less than 3/16 inch.
- 5. The reflector shall have a visible reflective area when mounted of not less than 6.5 square inches.
- 6. The lens shall consist of a smooth front surface free from projections or indentations other than the central mounting hole and manufacturer's identification
- 7. The rear surface shall be a prismatic configuration such that it will cause total internal reflection of light.
- 8. The prism arrangement in the lens shall be such that the lens will have a segmented appearance with at least 2 and not more than 6 segments in each unit.
- 9. The unit shall be permanently sealed against dust, water, and water vapor.
- 10. Fasteners for delineators shall be at least 3/16 inch diameter pan or round head machine screws (length shown in the plans) conforming to the requirements of ASTM F 568.
- 11. The reflectors shall meet specific intensity requirements shown in Table 1072.01.

**Reflector Requirements Minimum Specific Intensity** Observation **Entrance** (Candlepower per foot-candle) Angle, Angle, (degrees) (degrees) White Yellow Red Blue 0 120 72 30 0.1 12 20 29 12 0.1 48 4.8 0 20 12 5 0.33 2.0 20 2 0.33 8 5 8.0

**Table 1072.01** 

## 1072.03 -- Acceptance Requirements

- 1. Acceptable reflectors are shown on the NDR Approved Products List.
- 2. Fasteners for delineators shall be sample and tested in accordance with the requirements shown in the NDR *Materials Sampling Guide*.